

Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of transmitting data between a transmitter and a receiver, the method comprising:

transmitting, by the transmitter, a data packet onto multiple paths of a wireless network between the transmitter and the receiver, at least one of the paths including at least one repeater transceiver node;

forwarding, by the at least one repeater node, the data packet to the receiver and storing, by the at least one repeater node, a copy of the forwarded data packet;

issuing a no-acknowledge (NACK) signal over the network, by the receiver, if the data packet is not properly received by the receiver; and

initiating retransmission of the data packet onto the network by the at least one repeater node responsive to receipt of the NACK signal by the at least one repeater node, the at least one repeater node initiating retransmission of the data packet by transmitting the stored copy of the forwarded data packet to the receiver.

2. (Previously Presented) The method of claim 1 wherein said retransmission is effected by all repeater nodes that forwarded the data packet and that receive the NACK signal.

3. (Previously Presented) The method of claim 1 wherein said retransmission is effected by said at least one repeater node and the transmitter.

4. (Previously Presented) The method of claim 1 wherein the transmitter does not retransmit the data packet if the receiver issues the NACK signal.

5. (Previously Presented) The method of claim 4 wherein the transmitter does not listen for NACK signals relating to its own transmitted data packets.

6. (Previously Presented) The method of claim 1 wherein said retransmission of the data packet onto the network by the at least one repeater node includes using multiple paths available from the repeater node to the receiver.

7. (Previously Presented) The method of claim 1, further including the receiver issuing an acknowledge (ACK) signal in the event that the data packet is correctly received by said receiver, the at least one repeater node forwarding the ACK signal to the transmitter.

8. (Previously Presented) The method of claim 1, further including retransmitting the data packet, by the repeater node, after a first retransmittal interval if no ACK or NACK signal is received with respect to said forwarded data packet.

9. (Previously Presented) The method of claim 8, further including the transmitter retransmitting the data packet after a second retransmittal interval if no ACK signal is received, the second retransmittal interval being greater than the first retransmittal interval.

10. (Previously Presented) A repeater node to forward data packets, received from a transmitter node, to a receiver node that is an end destination of the packets, in a wireless network, the repeater node comprising:

- a receive circuit to receive data packets originating from the transmitter;
- a transmit circuit to forward the data packets to another node in the network;
- a pending packet buffer to store copies of the forwarded data packets; and
- a retransmission control circuit to initiate retransmission over the network of data packets of previously forwarded data packets for which no-acknowledge (NACK) signals are received, responsive to the NACK signals being received by the repeater node, the

retransmission control circuit configurable to initiate retransmission of the data packets for which NACK signals are received by transmitting the stored copies of these data packets.

11. (Previously Presented) The repeater node of claim 10, further including a purge circuit to remove a stored data packet from the pending packet buffer responsive to an acknowledge (ACK) signal being received with respect to that data packet.

12. (Previously Presented) The repeater node of claim 10 wherein the retransmission control circuit is configurable to transmit the data packets over all available paths.

13. (Previously Presented) The repeater node of claim 10, wherein the repeater node is configurable to forward ACK signals to the transmitter and not to forward NACK signals to the transmitter.

14. (Previously Presented) The repeater node of claim 10 wherein the retransmission control circuit is configurable to retransmit the data packets after a first retransmittal interval when no corresponding ACK or NACK signal is received.

15. (Previously Presented) A wireless network of communicating nodes, the network comprising:

a transmitter node, a receiver node and at least one repeater node to forward data packets, received from the transmitter node, to the receiver node that is an end destination of the data packets, the at least one repeater node including:

a receive circuit to receive the data packets originating from the transmitter;
a transmit circuit to forward the data packets to another node in the network;
a pending packet buffer to store copies of the forwarded data packets; and
a retransmission control circuit to initiate retransmission, over the network, of data packets of previously forwarded data packets in response to receiving no-acknowledge (NACK) signals, the retransmission control circuit configurable to initiate retransmission of the

data packets of the previously forwarded data packets by transmitting the stored copies of these data packets.

16. (Previously Presented) The network of claim 15 wherein the retransmission control circuit, in the repeater node, is configurable to retransmit the data packets after a first retransmittal interval when no corresponding ACK or NACK signal is received.

17. (Previously Presented) The network of claim 16 wherein said transmitter node is configurable to retransmit the data packets after a second retransmittal interval that is longer than the first retransmittal interval, when no corresponding ACK or NACK signal is received.

18. (Previously Presented) The network of claim 15, wherein the transmitter node does not retransmit data packets in response to receiving the NACK signals.

19. (Previously Presented) The network of claim 15, wherein the transmitter node does not listen for NACK signals relating to its own transmitted data packets.